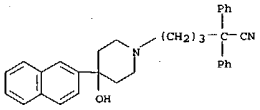
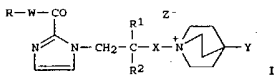
L4 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN 1-Piperidinepentanenitrile, 4-hydroxy-4-(2-naphthalenyl)-α,α-diphenyl-, monohydrochloride (9CI) (CA INDEX NAME)



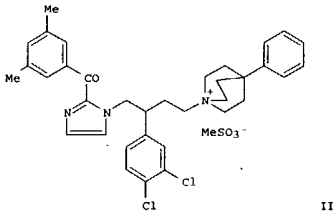
● HCl

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



I



II

AB Quaternary quinuclidines I [R = aryl, alkyl, heteroaryl; R1 = H, alkyl; R2 = aryl such as Ph, naphthyl, thienyl, indolyl, etc.; W = bond, CH2, CH2CH2; X = linking alkylene; Y =aryl, benzyl, heteroaryl, cycloalkyl; Z- = pharmaceutically acceptable anion, such as MeSO3-, Cl-, etc.] were prepared for use as tachykinin antagonists. Thus, II was prepared via reaction of 4-phenylquinuclidine with 1-methanesulfonyloxy-3-(3,4-dichlorophenyl)-4-[2-(3,5-dimethylbenzoyl)imidazol-1-yl]-butane in MeCN under reflux for 4 h. Some of the prepared compds. were tested for human NK1 and NK2 receptor binding affinity.
AN 1999:9851 CAPLUS
DN 130:52617
TI Preparation of quaternary ammonium compounds as tachykinin antagonists
IN Monaghan, Sandra Marina; Alker, David; Burns, Christopher John
PA Pfizer Limited, UK; Pfizer Inc.
SO PCT Int. Appl., 131 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9857972	A1	19981223	WO 1998-EP3500	19980605
	W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,				

L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

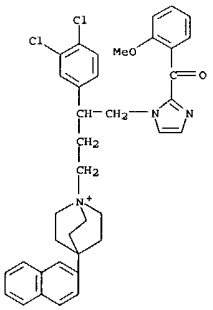
TW 479055	B	20020311	TW 1998-87107720	19980519	
AU 9882153	A1	19990104	AU 1998-82153	19980605	
AU 726027	B2	20001026			
TR 9903135	T2	20000421	TR 1999-9903135	19980605	
EP 994876	A1	20000426	EP 1998-932148	19980605	
EP 994876	B1	20040908			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO					
NZ 501286	A	20000728	NZ 1998-501286	19980605	
BR 9810619	A	20000912	BR 1998-10619	19980605	
JP 2000513030	T2	20001003	JP 1999-503687	19980605	
JP 3280993	B2	20020513			
SK 283346	B6	20030603	SK 1999-1744	19980605	
AT 275564	E	20040915	AT 1998-932148	19980605	
AP 947	A	20010308	AP 1998-1262	19980611	
W: BW, GM, KE, MW, UG, ZM, ZW					
ZA 9805239	A	19991217	ZA 1998-5239	19980617	
HR 980337	B1	20030228	HR 1998-980337	19980618	
BG 103919	A	20010731	BG 1999-103919	19991123	
BG 63341	B1	20011031			
NO 9905782	A	20000216	NO 1999-5782	19991125	
MX 9912096	A	20000430	MX 1999-12096	19991217	
US 6207678	B1	20010327	US 2000-380370	20000424	
US 6380396	B1	20020430	US 2000-734266	20001211	
PRAI GB 1997-12882	A	19970618			
WO 1998-EP3500	W	19980605			
WO 1998-IB3500	W	19980606			
US 2000-380370	A3	20000424			

OS MARPAT 130:52617
IT **217431-96-4P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of quaternary ammonium compds. as tachykinin antagonists)
RN 217431-96-4 CAPLUS
CN 1-Azoniabicyclo[2.2.2]octane, 1-[3-(3,4-dichlorophenyl)-4-[2-(2-methoxybenzoyl)-1H-imidazol-1-yl]butyl]-4-(2-naphthalenyl)-, methanesulfonate (9CI) (CA INDEX NAME)

CM 1

CRN 217431-95-3
CMF C38 H38 Cl2 N3 O2

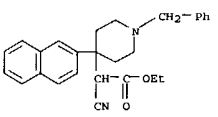
L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



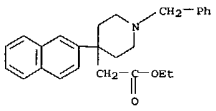
CM 2

CRN 16053-58-0
CMF C H3 O3 S

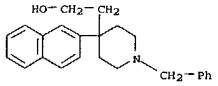
IT **217431-97-5P 217431-98-6P 217431-99-7P**
217432-01-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of quaternary ammonium compds. as tachykinin antagonists)
RN 217431-97-5 CAPLUS
CN 4-Piperidineacetic acid, α-cyano-4-(2-naphthalenyl)-1-(phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RN 217431-98-6 CAPLUS
CN 4-Piperidineacetic acid, 4-(2-naphthalenyl)-1-(phenylmethyl)-, ethyl ester (9CI) (CA INDEX NAME)



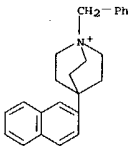
RN 217431-99-7 CAPLUS
CN 4-Piperidineethanol, 4-(2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 217432-01-4 CAPLUS
CN 1-Azoniabicyclo[2.2.2]octane, 4-(2-naphthalenyl)-1-(phenylmethyl)-, salt with 4-methylbenzenesulfonic acid (1:1) (9CI) (CA INDEX NAME)

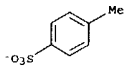
CM 1

CRN 217432-00-3
CMF C24 H26 N



CM 2

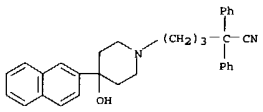
L4 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CRN 16722-51-3
CMF C7 H7 O3 S



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

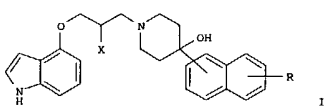
L4 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AB The CC chemokines macrophage inflammatory protein-1α (MIP-1α) and RANTES (regulated on activation normal T cell expressed) have been implicated in rheumatoid arthritis and multiple sclerosis. Since their effects are mediated through the CCR1 chemokine receptor, we set up a small mol. CCR1 antagonist program to search for inhibitors. Through high capacity screening we discovered a number of 4-hydroxypiperidine compds. with CCR1 antagonist activity and report their synthesis and in vitro pharmacol. here. Scatchard anal. of the competition binding data revealed that the compds. had Ki values ranging from 40 to 4000 nM. The pharmacol. profile of the most potent member of this series, (2,2-diphenyl-5-(4-chlorophenyl)piperidinlyl)valeronitrile (I), was further evaluated. Compound I showed concentration-dependent inhibition of MIP-1α-induced extracellular acidification and Ca2+ mobilization demonstrating functional antagonism. When given alone, the compound did not elicit any responses, indicating the absence of intrinsic agonist activity. Compound I inhibited MIP-1α- and RANTES-induced migration in peripheral blood mononuclear cells in a dose-responsive manner. Selectivity testing against a panel of seven transmembrane domain receptors indicated that compound I is inactive on a number of receptors at concns. up to 10 μM. This is the first description of CCR1 receptor antagonists that may be useful in the treatment of chronic inflammatory diseases involving MIP-1α, RANTES, and CCR1.
AN 1998:400595 CAPLUS
DN 129:144656
TI Identification and characterization of small molecule functional antagonists of the CCR1 chemokine receptor
AU Hesselgesser, Joseph; Ng, Howard P.; Liang, Meina; Zheng, Wei; May, Karen; Bauman, John G.; Monahan, Sean; Islam, Imadul; Wei, Guo Ping; Ghannam, Ameen; Taub, Dennis D.; Rosser, Mary; Snider, R. Michael; Morrissey, Michael M.; Perez, H. Daniel; Horuk, Richard
CS Department of Immunology, Berlex BioSciences, Richmond, CA, 94806, USA
SO Journal of Biological Chemistry (1998), 273(25), 15687-15692
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
IT **210815-63-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and characterization of 4-hydroxypiperidine compds. as functional antagonists of CCR1 chemokine receptor)
RN 210815-63-7 CAPLUS
CN 1-Piperidinepentanenitrile, 4-hydroxy-4-(2-naphthalenyl)-α,α-diphenyl- (9CI) (CA INDEX NAME)

L4 ANSWER 12 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

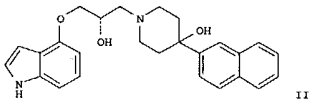


RE.CNT 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



I



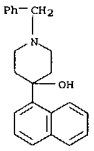
II

AB A series of title compds. I [X = H, OH; R = H, OH, cyano, alkyl, acyl, alkenyl, alkynyl, aryl, alkoxy, aryloxy, arylalkenyloxy, alkyl/aryl-thio/sulfinyl/sulfonyl, NR1R2, CONR1R2; n = 0, 1, 2; R1, R2 = H, alkyl, Ph; or NR1R2 = pyrrolidino, piperidino, or 4-R3-piperazino; R3 = H, alkyl, Ph, CH2Ph, or alkoxycarbonyl] and their pharmaceutically acceptable salts are disclosed. The compds. are effective pharmaceuticals for the treatment of conditions related to or affected by the reuptake of serotonin, and by the serotonin 1A receptor, yet they lack mutagenic potential as measured by assays of chromosomal aberration (no data). The compds. are particularly useful for alleviating the symptoms of nicotine and tobacco withdrawal, and for the treatment of depression and other conditions for which serotonin reuptake inhibitors are used. Some I are said to show serotonin reuptake inhibitory activity in the low nM range. Nineteen synthetic examples and 23 precursor prepns. are given. For instance, N-alkylation of 4-hydroxy-4-(naphth-2-yl)piperidine with (S)-(+)-4-(oxiranylmethoxy)-1H-indole (prepn. given) in refluxing MeOH gave 70% title compound II, which was also isolated as the oxalate.
AN 1998:31306 CAPLUS
DN 128:88790
TI Preparation of 1-(4-indolyloxy)-3-(4-hydroxy-4-naphthylpiperidin-1-yl)propane derivatives having effects on serotonin-related systems
IN Koch, Daniel J.; Rocco, Vincent P.
PA Eli Lilly and Co., USA
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

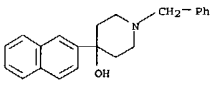
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 9748698	A1	19971224	WO 1997-US10603	19970619
W: AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5912256	A	19990615	US 1997-861445	19970522
EP 814084	A1	19971229	EP 1997-304280	19970618
EP 814084	B1	20010808		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, PI, RO				
AT 203990	E	20010815	AT 1997-304280	19970618
ES 2160894	T3	20011116	ES 1997-304280	19970618
CA 2257962	AA	19971224	CA 1997-2257962	19970619
AU 9734017	A1	19980107	AU 1997-34017	19970619
JP 2000513358	T2	20001010	JP 1998-503318	19970619
HK 1008525	A1	20020315	HK 1998-108777	19980629
GR 3037072	T3	20020131	GR 2001-401944	20011030
PRAI US 1996-20131P	P	19960620		
WO 1997-US10603	W	19970619		

OS MARPAT 128:88790
IT **130305-57-6P**, 1-Benzyl-4-hydroxy-4-(naphth-1-yl)piperidine **188862-05-7P**, 1-Benzyl-4-hydroxy-4-(naphth-2-yl)piperidine **200875-18-9P**, 1-Benzyl-4-hydroxy-4-(6-methoxynaphth-2-yl)piperidine **200875-19-0P**, 1-Benzyl-4-hydroxy-4-(7-methoxynaphth-2-yl)piperidine **200875-20-3P**, 1-Benzyl-4-hydroxy-4-(6-ethoxynaphth-2-yl)piperidine **200875-21-4P**, 1-Benzyl-4-hydroxy-4-(6-propoxynaphth-2-yl)piperidine **200875-22-5P**, 1-Benzyl-4-hydroxy-4-(6-isopropoxynaphth-2-yl)piperidine **200875-23-6P**, 1-Benzyl-4-hydroxy-4-[6-(hexyloxy)naphth-2-yl]piperidine **200875-24-7P**, 1-Benzyl-4-hydroxy-4-[6-(phenethyloxy)naphth-2-yl]piperidine **200875-26-9P**, 1-Benzyl-4-hydroxy-4-(6-hydroxynaphth-2-yl)piperidine
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(intermediate; preparation of (indolyloxy)(hydroxynaphthylpiperidinyl)propane derivs. as serotoninergic agents and reuptake inhibitors)
RN 130305-57-6 CAPLUS
CN 4-Piperidinol, 4-(1-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

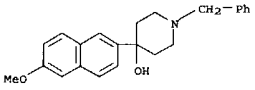
L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



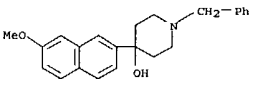
RN 188862-05-7 CAPLUS
CN 4-Piperidinol, 4-(2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 200875-18-9 CAPLUS
CN 4-Piperidinol, 4-(6-methoxy-2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

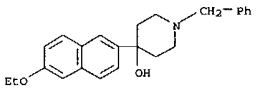


RN 200875-19-0 CAPLUS
CN 4-Piperidinol, 4-(7-methoxy-2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

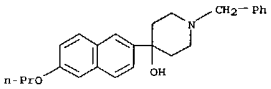


RN 200875-20-3 CAPLUS
CN 4-Piperidinol, 4-(6-ethoxy-2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

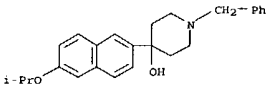
L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



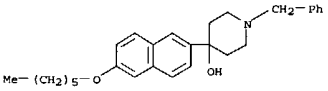
RN 200875-21-4 CAPLUS
CN 4-Piperidinol, 1-(phenylmethyl)-4-(6-propoxy-2-naphthalenyl)- (9CI) (CA INDEX NAME)



RN 200875-22-5 CAPLUS
CN 4-Piperidinol, 4-[6-(1-methylethoxy)-2-naphthalenyl]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

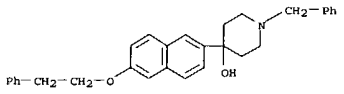


RN 200875-23-6 CAPLUS
CN 4-Piperidinol, 4-[6-(hexyloxy)-2-naphthalenyl]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

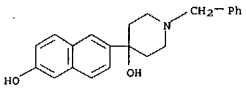


RN 200875-24-7 CAPLUS
CN 4-Piperidinol, 4-[6-(2-phenylethoxy)-2-naphthalenyl]-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

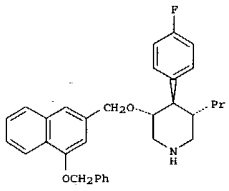
L4 ANSWER 13 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 200875-26-9 CAPLUS
CN 4-Piperidinol, 4-(6-hydroxy-2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



AB New piperidine and azabicyclooctane derivs. (> 1000 compds.) are renin inhibitors for treatment of high blood pressure, heart and kidney insufficiency. Thus, the piperidine derivative I was prepared from 1-benzyl-3-propyl-4-piperidinone by reaction with 4-FC6H4Br, followed by 1-benzyloxy-3-chloromethylnaphthalene and deblocking. I had a renin-inhibiting IC50 of 0.317 μM.
AN 1997:307688 CAPLUS
DN 126:277402
TI New 4-aryl-3-aralkoxypiperidines and -azabicyclooctanes for treating heart and kidney insufficiency
IN Binggeli, Alfred; Breu, Volker; Bur, Daniel; Fischli, Walter; Gueller, Rolf; Hirth, Georges; Maerki, Hans-Peter; Mueller, Marcel; Oefner, Christian; Stadler, Heinz; Vieira, Eric; Wilhelm, Maurice; Woetl, Wolfgang
PA F. Hoffmann-La Roche Ag, Switz.
SO PCT Int. Appl., 492 pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

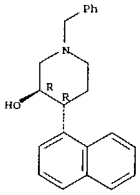
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9709311	A1	19970313	WO 1996-EP3803	19960829
	W: AU, BR, CA, CN, CZ, HU, IL, JP, KR, MX, NO, NZ, PL, RU, SG, TR				
	RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	CA 2230931	AA	19970313	CA 1996-2230931	19960829
	AU 9667432	A1	19970327	AU 1996-67432	19960829
	AU 708616	B2	19990805		
	EP 863875	A1	19980916	EP 1996-927715	19960829
	EP 863875	B1	20030604		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
	CN 1202152	A	19981216	CN 1996-197674	19960829
	JP 11500447	T2	19990112	JP 1996-510837	19960829
	BR 9610385	A	19990706	BR 1996-10385	19960829

L4 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

	NZ 315677	A	20000228	NZ 1996-315677	19960829
	RU 2167865	C2	20010527	RU 1998-106388	19960829
	AT 242213	E	20030615	AT 1996-927715	19960829
	IL 123293	A1	20030624	IL 1996-123293	19960829
	CZ 292327	B6	20030917	CZ 1998-684	19960829
	PT 863875	T	20031031	PT 1996-927715	19960829
	ES 2201192	T3	20040316	ES 1996-927715	19960829
	ZA 9607424	A	19970307	ZA 1996-7424	19960902
	TW 474932	B	20020201	TW 1996-85110684	19960902
	NO 9800954	A	19980428	NO 1998-954	19980305
	US 6051712	A	20000418	US 1999-255185	19990222
	US 6150526	A	20001121	US 1999-456283	19991207
PRAI	CH 1995-2548	A	19950907		
	CH 1996-1876	A	19960726		
	WO 1996-EP3803	W	19960829		
	US 1996-711339	A3	19960906		
	US 1999-255185	A1	19990222		

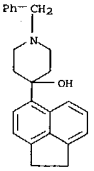
OS MARPAT 126:277402
IT **188861-08-7P 188861-21-4P 188861-25-8P 188862-05-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of piperidine and azabicyclooctane derivs. as renin inhibitors)
RN 188861-08-7 CAPLUS
CN 3-Piperidinol, 4-(1-naphthalenyl)-1-(phenylmethyl)-, (3R,4R)-rel- (9CI) (CA INDEX NAME)

Relative stereochemistry.



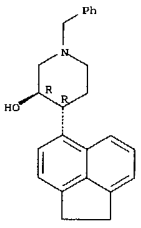
RN 188861-21-4 CAPLUS
CN 4-Piperidinol, 4-(1,2-dihydro-5-acenaphthylenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 14 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

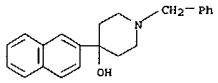


RN 188861-25-8 CAPLUS
CN 3-Piperidinol, 4-(1,2-dihydro-5-acenaphthylenyl)-1-(phenylmethyl)-, (3R,4R)-rel- (9CI) (CA INDEX NAME)

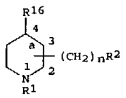
Relative stereochemistry.



RN 188862-05-7 CAPLUS
CN 4-Piperidinol, 4-(2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



I

AB There is described novel (N-phthalimidoalkyl)piperidine compds. I or a pharmaceutically acceptable salt or an N-oxide thereof [a is a single or double bond, provided that when a is a double bond, R2(CH2)n is attached at C-4 and R16 is not present; n is 1-4, provided that when (CH2)n is attached to the 2-position of the piperidine ring then n is 2-4; R1 is (CH2)mR3 or (CH2)pAr, where m is 1-4 and p is 1-4; R2 is N-phthalimido] which exhibit selective σ-receptor antagonism and therefore are useful in the treatment of physiol. or drug induced psychosis and dyskinesia in a mammal. Also described are pharmaceutical compns. containing σ selective compds. and methods of using these compns. for treating physiol. or drug induced psychosis or dyskinesia in a mammal. Further provided are methods for preparing the compds. of this invention. Kis in the 1-30 nM range were measured in the in vitro σ-receptor binding assay.
AN 1995:227442 CAPLUS
DN 122:132986
TI (N-phthalimidoalkyl) piperidines useful as treatments for psychosis
IN Ciganek, Engelbert; Tam, Sang W.; Wright, Ann S.
PA Du Pont Merck Pharmaceutical Co., USA
SO U.S., 41 pp. Cont.-in-part of U.S. Ser. No. 602,024, abandoned.
CODEN: USXXAM
DT Patent
LA English
FAN.CNT 3

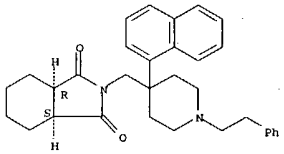
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 5356906	A	19941018	US 1992-876542	19920430
	IL 96144	A1	19940624	IL 1990-96144	19901028
	ZA 9008641	A	19920624	ZA 1990-8641	19901029
	WO 9322310	A1	19931111	WO 1993-US3984	19930428
	W: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	AU 9340345	A1	19931129	AU 1993-40345	19930428
	US 5480892	A	19960102	US 1994-298268	19940831
PRAI	US 1989-428097		19891027		
	US 1990-602024		19901023		
	US 1992-876542		19920430		
	WO 1993-US3984		19930428		

L4 ANSWER 15 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
OS MARPAT 122:132986
IT **135903-59-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
((N-phthalimidoalkyl)piperidines as selective σ-receptor antagonists useful as treatments for psychosis)
RN 135903-59-2 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, hexahydro-2-[[4-(1-naphthalenyl)-1-(2-phenylethyl)-4-piperidinyl]methyl]-, (3aR,7aS)-rel-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 135903-58-1
CMF C32 H36 N2 O2

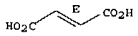
Relative stereochemistry.



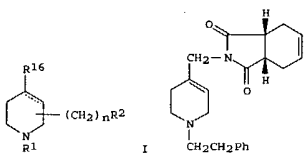
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



L4 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



I II

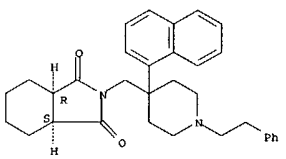
AB The title compds. I [R1 = cycloalkyl- or aryl-substituted alkyl; R2 = (un)substituted phthalimido, etc.; R16 = OH, alkoxy, alkyl, (un)substituted Ph or naphthyl, etc.; n = 0-4; the dotted line is an optional double bond], which are selective sigma receptor antagonists useful for the treatment of physiol. or drug-induced psychosis and dyskinesia, are prepared and I-containing formulations presented. Thus, 1-(2-phenylethyl)-4-piperidinemethylamine was condensed with cis-1,2,3,6-tetrahydrophthalic anhydride, and the free base salified with fumaric acid, producing fumarate II (m.p. 179-181°). II demonstrated guinea pig brain membrane-derived sigma receptor Ki of 31-100 nM and dopamine D-2 receptor of Ki >500 nM, vs. 1-30 and 1-30, resp., for haloperidol.
AN 1994:270118 CAPLUS
DN 120:270118
TI (N-phthalimidoalkyl)piperidine sigma receptor antagonists for the treatment of psychoses
IN Ciganek, Engelbert; Tam, Sang William; Wright, Ann Sorrentino
PA Du Pont Merck Pharmaceutical Co., USA
SO PCT Int. Appl., 129 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9322310	A1	19931111	WO 1993-US3984	19930428
	W: AU, BB, BG, BR, CA, CZ, FI, HU, JP, KP, KR, KZ, LK, MG, MN, MW, NO, NZ, PL, RO, RU, SD, SK, UA, VN				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
	US 5356906	A	19941018	US 1992-876542	19920430
	AU 9340345	A1	19931129	AU 1993-40345	19930428
PRAI	US 1992-876542		19920430		
	US 1989-428097		19891027		
	US 1990-602024		19901023		
	WO 1993-US3984		19930428		

OS MARPAT 120:270118
IT **135903-58-1 135903-59-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation as antipsychotic sigma receptor antagonist)
RN 135903-58-1 CAPLUS

L4 ANSWER 16 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
CN 1H-Isoindole-1,3(2H)-dione, hexahydro-2-[[4-(1-naphthalenyl)-1-(2-phenylethyl)-4-piperidinyl]methyl]-, cis- (9CI) (CA INDEX NAME)

Relative stereochemistry.

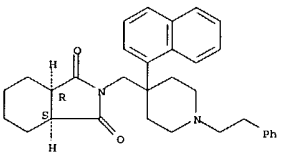


RN 135903-59-2 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, hexahydro-2-[[4-(1-naphthalenyl)-1-(2-phenylethyl)-4-piperidinyl]methyl]-, (3aR,7aS)-rel-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 135903-58-1
CMF C32 H36 N2 O2

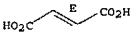
Relative stereochemistry.



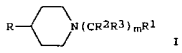
CM 2

CRN 110-17-8
CMF C4 H4 O4

Double bond geometry as shown.



L4 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



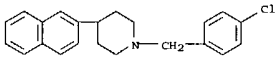
I

AB The present invention consists of title compds. I [R = (un)substituted alkyl, cycloalkyl, aryl, heterocyclyl; R1 = (un)substituted alkyl, alkenyl, alkynyl, cycloalkyl, aryl, heterocyclyl; m = 0-3; R2, R3 = H, alkyl, Ph; with the proviso that R ≠ 4-Me3CC6H4] or an acid-addition salt thereof, a process for the preparation of these piperidine derivs., compns. containing such compds. and their use as fungicides. Thus, 4-(4-chlorophenyl)-1,3,5,6-tetrahydropyridine (10.0 g) was hydrogenated over 5% Pd/C in EtOAc (200 mL) to give 99% 4-(4-chlorophenyl)piperidine. The latter compound (2.0 g) was treated with PhCH2Br (1.22 mL) and K2CO3 (4.26 g) in THF (100 mL) to give 76% N-benzyl-4-(4-chlorophenyl)piperidine (II). II showed >80% control of powdery mildew on barley seedlings and wheat eyespot at dosages of 1000 and 100 ppm resp.
AN 1992:591696 CAPLUS
DN 117:191696
TI Piperidine derivatives
IN Carter, Paul Andrew; Tapp, Stevens James; Daniels, Nicholas John
PA Shell Internationale Research Maatschappij B. V., Neth.
SO Eur. Pat. Appl., 35 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

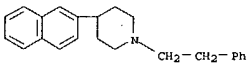
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 494717	A1	19920715	EP 1992-200037	19920108
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, PT				
	WO 9212130	A1	19920723	WO 1992-EP40	19920108
	W: BR, HU, JP, KR, PL, RU, US				
	BR 9205423	A	19940315	BR 1992-5423	19920108
	HU 65119	A2	19940428	HU 1993-1987	19920108
	JP 06506441	T2	19940721	JP 1992-501676	19920108
	RU 2097375	C1	19971127	RU 1993-51789	19920108
	ZA 9200149	A	19920930	ZA 1992-149	19920109
	CN 1063101	A	19920729	CN 1992-100196	19920110
	US 5489599	A	19960206	US 1993-81298	19930628
PRAI	GB 1991-505		19910110		
	WO 1992-EP40		19920108		

OS MARPAT 117:191696
IT **143867-29-2P 143867-30-5P 143867-32-7P**
143867-39-4P 143867-41-8P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and fungicidal activity of)

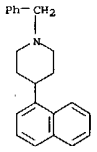
L4 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



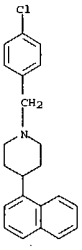
RN 143867-41-8 CAPLUS
CN Piperidine, 4-(2-naphthalenyl)-1-(2-phenylethyl)- (9CI) (CA INDEX NAME)



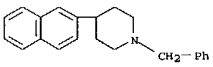
L4 ANSWER 17 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RN 143867-29-2 CAPLUS
CN Piperidine, 4-(1-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 143867-30-5 CAPLUS
CN Piperidine, 1-[(4-chlorophenyl)methyl]-4-(1-naphthalenyl)- (9CI) (CA INDEX NAME)

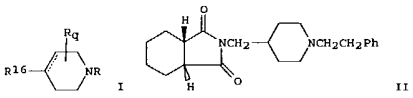


RN 143867-32-7 CAPLUS
CN Piperidine, 4-(2-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)



RN 143867-39-4 CAPLUS
CN Piperidine, 1-[(4-chlorophenyl)methyl]-4-(2-naphthalenyl)- (9CI) (CA INDEX NAME)

L4 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



I II

AB The title compds. [I; R = (CH2)nR2; R1 = (CH2)mR3, (CH2)pAr; R2 is selected from 39 general benzo-fused phthalimido and analogous groups; R3 = cycloalkyl; Ar = (un)substituted Ph, naphthyl, pyridyl, pyrimidinyl, (iso)quinolyl; R16 = H, OH, alkoxy, acyloxy, alkyl, (un)substituted (hetero)aryl; dashed line = optional bond; when said bond is present R16 = (CH2)nR2 and q = 0, otherwise q = 1; m, p = 1-4; n = 0-4] were prepared Thus, 4-aminomethylpyridine was cyclocondensed with cis-1,2-cyclohexanedicarboxylic anhydride and the product N-alkylated with BrCH2CH2Ph to give, after hydrogenation over PtO2, title compound II which inhibited isolation-induced aggressive behavior in mice when administered orally (no dose given).
AN 1991:535930 CAPLUS
DN 115:135930
TI Preparation of (phthalimidoalkyl)piperidines and analogs as psychotropic agents
IN Ciganek, Engelbert; Tam, Sang William; Wright, Ann Sorrentino
PA du Pont de Nemours, E. I., and Co., USA
SO PCT Int. Appl., 113 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 3

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 9106297	A1	19910516	WO 1990-US6102	19901029
	W: AU, CA, FI, HU, JP, KR, NO, SU				
	RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
	IL 96144	A1	19940624	IL 1990-96144	19901028
	AU 9066265	A1	19910531	AU 1990-66265	19901029
	AU 655406	B2	19941222		
	ZA 9008641	A	19920624	ZA 1990-8641	19901029
	EP 497843	A1	19920812	EP 1990-916143	19901029
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	JP 06504980	T2	19940609	JP 1990-515062	19901029
	NO 9201594	A	19920424	NO 1992-1594	19920424
	FI 9201856	A	19920424	FI 1992-1856	19920424
PRAI	US 1989-428097		19891027		
	US 1990-602024		19901023		
	WO 1990-US6102		19901029		

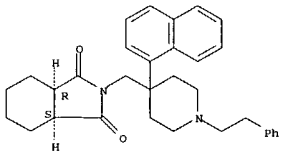
OS MARPAT 115:135930
IT **135903-59-2P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);

L4 ANSWER 18 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
BIOL (Biological study); PREP (Preparation); USES (Uses)
(prepn. of, as psychotropic agent)
RN 135903-59-2 CAPLUS
CN 1H-Isoindole-1,3(2H)-dione, hexahydro-2-[[4-(1-naphthalenyl)-1-(2-phenylethyl)-4-piperidinyl]methyl]-, (3aR,7aS)-rel-, (2E)-2-butenedioate (1:1) (9CI) (CA INDEX NAME)

CM 1

CRN 135903-58-1
CMF C32 H36 N2 O2

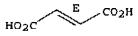
Relative stereochemistry.



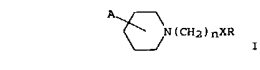
CM 2

CRN 110-17-8
CMF C4 H4 O4

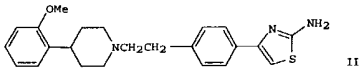
Double bond geometry as shown.



L4 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
GI



I



II

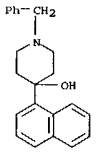
AB The title compds. [I; A = (un)substituted Ph, tolyl, naphthyl; R = tolyl, 5-oxindolyl, 2-amino-5-thiazolylphenyl, 2-methyl-4-oxo-4H-pyrido[1,2a]pyrimidin-3-yl, (un)substituted Ph, etc.; X = O, S, bond; n = 2-4] were prepared Thus, the Grignard reagent prepared from 2-BrC6H4OMe was
condensed with 1-benzyl-4-piperidone and the product converted in 2 steps to 4-(2-methoxyphenyl)piperidine which was refluxed with 4-[4-(2-chloroethyl)phenyl]-2-aminothiazole in MeCOCH2CHMe2 containing NaI and
Na2CO3 to give title compound II which had IC50 of 36.3 nM against N-propylnorapomorphine binding at dopamine-2 receptors in vitro.
AN 1990:611852 CAPLUS
DN 113:211852
TI Preparation of N-(aralkyl)arylpiperidines and analogs as neuroleptic agents
IN Nagel, Arthur Adam
PA Pfizer Inc., USA
SO Eur. Pat. Appl., 16 pp.
CODEN: EPXXDW
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 372776	A2	19900613	EP 1989-312269	19891127
	EP 372776	A3	19911023		
	EP 372776	B1	19960925		
	R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
	WO 9006303	A1	19900614	WO 1988-US4300	19881202
	W: FI, HU, NO, RO, SU, US				
	HU 59127	A2	19920428	HU 1989-2324	19881202
	HU 207310	B	19930329		
	AT 143366	E	19961015	AT 1989-312269	19891127
	ES 2092475	T3	19961201	ES 1989-312269	19891127
	CA 2004249	AA	19900602	CA 1989-2004249	19891130
	CA 2004249	C	19960917		
	JP 02275853	A2	19901109	JP 1989-312235	19891130
	JP 07010850	B4	19950208		
	DK 8906068	A	19900718	DK 1989-6068	19891201
	ZA 8909192	A	19910731	ZA 1989-9192	19891201

L4 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

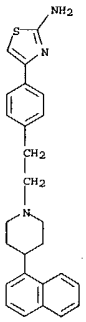
	AU 8945869	A1	19900628	AU 1989-45869	19891204
	AU 633858	B2	19930211		
	US 5153206	A	19921006	US 1990-566435	19900726
	NO 9003383	A	19901001	NO 1990-3383	19900801
	NO 175257	B	19940613		
	NO 175257	C	19940921		
	FI 95465	B	19951031	FI 1990-3829	19900801
	FI 95465	C	19960212		
	US 5294619	A	19940315	US 1992-921878	19920729
PRAI	WO 1988-US4300		19881202		
	US 1990-566435		19900726		

OS CASREACT 113:211852; MARPAT 113:211852
IT **130305-57-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, in preparation of neuroleptic agents)
RN 130305-57-6 CAPLUS
CN 4-Piperidinol, 4-(1-naphthalenyl)-1-(phenylmethyl)- (9CI) (CA INDEX NAME)

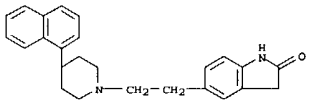


IT **130305-39-4P 130305-41-8P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as neuroleptic agent)
RN 130305-39-4 CAPLUS
CN 2-Thiazolamine, 4-[4-[2-[4-(1-naphthalenyl)-1-piperidinyl]ethyl]phenyl]- (9CI) (CA INDEX NAME)

L4 ANSWER 19 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



RN 130305-41-8 CAPLUS
CN 2H-Indol-2-one, 1,3-dihydro-5-[2-[4-(1-naphthalenyl)-1-piperidinyl]ethyl]- (9CI) (CA INDEX NAME)



L4 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

AB Analogs of the prodine analgesics were prepared and tested for analgesic activity. A good correlation seems to exist between the energy level of the highest occupied mol. orbital and biol. activity. The energy level of the highest occupied mol. orbital of the aryl moiety of these analogs may permit a charge transfer interaction between the aryl groups of the analgesic mols. and their receptors with the aryl groups acting as charge donors.

AN 1980:604417 CAPLUS

DN 93:204417

TI Electronic study of receptor binding of analgesic aryl moiety. II: prodine analogs

AU Razzak, Khalid Sabih A.; Hamid, Khawla A.

CS Coll. Pharm., Univ. Baghdad, Baghdad, Iraq

SO Journal of Pharmaceutical Sciences (1980), 69(7), 796-9
CODEN: JPMSAE; ISSN: 0022-3549

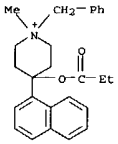
DT Journal

LA English

IT **75446-52-5P 75446-54-7P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation and analgesic activity of, energy level of HOMO in relation to)

RN 75446-52-5 CAPLUS

CN Piperidinium, 1-methyl-4-(1-naphthalenyl)-4-(1-oxopropoxy)-1-(phenylmethyl)-, bromide (9CI) (CA INDEX NAME)

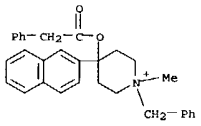


● Br⁻

RN 75446-54-7 CAPLUS

CN Piperidinium, 1-methyl-4-(2-naphthalenyl)-4-[(phenylacetyl)oxy]-1-(phenylmethyl)-, bromide (9CI) (CA INDEX NAME)

L4 ANSWER 20 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

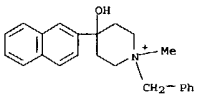


● Br⁻

IT **75446-46-7P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and esterification of)

RN 75446-46-7 CAPLUS

CN Piperidinium, 4-hydroxy-1-methyl-4-(2-naphthalenyl)-1-(phenylmethyl)-, bromide (9CI) (CA INDEX NAME)



● Br⁻

L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN

GI For diagram(s), see printed CA Issue.

AB The synthesis of N-phenethyl-4-heteroaryl-4-piperidinols and related compds. by addition of Li aryls to N-phenethyl-4-piperidones was described.
Treatment of the alcs. with Ac2O-C5H5N gave either esters or, more commonly, an elimination product. Direct acylation of Li aryl-piperidone complexes gave esters which, in certain cases, were readily converted into ether salts with excess alc. HCl. These results were interpreted in terms of the electronic character of the 4-aryl substituent. The analgesic activities in mice of various compds. were given and the results discussed in terms of isosteric replacement of Ph in analgesics. Freshly distilled furan (1.7 g.) and PhLi in Et2O (from 0.43 g. Li and 4.75 g. PhBr) refluxed 2 hrs., cooled in an ice bath, treated with 5.4 g. CH2.CHR.CO.CH2.CH2.NCH2CH2Ph (I) (R = Me), the mixture stirred 30 min. at room temperature, added to crushed ice and excess AcOH, stored at 5°, the separated solid washed with Et2O, treated with aqueous NH3, extracted with Et2O, the extract dried, and the Et2O removed gave 4.2 g. crude CH2.CHR.CAr(OH).CH2.CH2.NCH2CH2Ph (II) (R = Me, Ar = 2-furyl) (III), oil, converted into III HCl salt containing 1 mole EtOH crystallization, m. 187-8° (decomposition) (sinters at 92°), equivalent weight 365. Crude II (3.1 g.), 4 ml. (EtCO)2O (IV), and 4 ml. C5H5N refluxed 3 hrs., concentrated in vacuo, the residue converted to the HCl salt, and the product recrystd. from EtOH-Et2O gave CH2.CR:CAr.CH2.CH2.NCH2CH2Ph (or the double bond may be in the 4-5 position) (V) (R = Me, Ar = 2-furyl) HCl salt (VI), m. 204-4.5° (decomposition). The complex from 5.4 g. I (R = Me) and furyllithium (prepared as above) cooled in an ice bath, treated with 3 ml. Ac2O in C6H6, the mixture stirred 30 min. at room temperature, added to crushed ice and excess AcOH, and worked up as above gave 5.3 g. crude CH2.CHR.CAr(OAc).CH2.CH2.NCH2CH2Ph (VII) (R = Me, Ar = 2-furyl) (VIII), equivalent weight 336, ν 1738 cm.-1, converted with excess alc. HCl to CH2.CHR.CAr(OEt).CH2.CH2.NCH2CH2Ph (IX) (R = Me, Ar = 2-furyl) HCl salt, m. 181-2° (decomposition) (EtOH-Et2O). I (R = Me) (21.7 g.) treated with thienyllithium (prepared from 8.4 g. thiophene, 19 g. PhBr, and 1.7 g. Li as described above) and worked up as above gave 22.5 g. II (R = Me, Ar = 2-thienyl) (X), m. 91° [petr. ether (b. 40-60°)-Me2CO]. X treated with IV-C5H5N as above gave V (R = Me, Ar = 2-thienyl) HCl salt (XI) m. 208-10° (decomposition). Direct treatment of the complex from I (R = Me) and thienyllithium with Ac2O and work-up of the mixture as above gave crude VII (R = Me, Ar = 2-thienyl) (XII), converted by neutralization with alc. HCl into XII HCl salt, m. 213-14° (decomposition) (EtOH-Et2O), equivalent weight 384, ν 1741 cm.-1 Crude XII with excess alc. HCl gave IX (R = Me, Ar = 2-thienyl) (XIII) HCl salt, m. 220-2° (decomposition) (EtOH-Et2O); XIII picrate m. 149-50°, equivalent weight 556. I (R = Me) (15 g.) treated with 1-naphthyllithium (from 1.4 g. Li and 21 g. 1-C10H7Br) and worked up as usual gave 21 g. II (R = Me, Ar = 1-naphthyl) (XIV); HCl salt m. 266° (EtOH). Direct acylation of I (R = Me)-1-naphthyllithium complex with Ac2O as above and treatment of the

L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)

crude base with excess HCl gave IX (R = Me, Ar = 1-naphthyl) HCl salt, m. 221-3° (EtOH). I (R = H) (16.5 g.) with 1-naphthyllithium as before gave 19.5 g. II (R = H, Ar = 1-naphthyl) (XV), m. 173° (C6H6). XV with Ac2O-C5H5N as before gave V (R = H, Ar = 1-naphthyl); HBr salt m. 264° (EtOH), equiv. wt. 390. Direct acylation of I (R = H)-1-naphthyllithium complex with Ac2O and treatment of the base with excess alc. HBr gave VIII (R = H, Ar = 1-naphthyl) HBr salt, m. 224° (EtOH), equiv. wt. 433. I (R = Me) (10.8 g.) added to 2-pyridyllithium, prepd. from LiBu and 7.5 g. 2-bromopyridine by the method of Nunn and Schofield (CA 46, 9563h), and the mixt. worked up as usual gave 9.0 g. II (R = Me, Ar = 2-pyridyl) (XVI) [di-HCl salt m. 240-1° (decompn.) (EtOH-Et2O), equiv. wt. 210], which yielded VII (R = Me, Ar = 2-pyridyl) (XVII) [di-HCl salt m. 203-4° (decompn.) (EtOH)] and an EtCO ester di-HCl salt (XVIII), m. 183-4° (EtOH-Et2O), equiv. wt. 218. Refluxing 1 hr. XVI with 3:1 AcOH-HCl gave recovered XVI. I (R = H) (17.5 g.) added to PhCH2MgCl (from 22 g. PhCH2Cl and 4.3 g. Mg) and the mixt. worked up as usual gave 17.5 g. II (R = H, Ar = CH2Ph) (XIX) HBr salt, m. 218° (EtOH), equiv. wt. 378, which gave with Ac2O-C5H5N VII (R = H, Ar = CH2Ph) (XIXa) HBr salt, m. 241° (EtOH), equiv. wt. 419, and with IV-C5H5N the EtCO ester (XX) [HBr salt m. 214° (EtOH), equiv. wt. 434]. I (R = Me) (20 g.) treated in the usual manner with PhCH2MgBr gave 23 g. II (R = Me, Ar = CH2Ph) (XXI); HBr salt m. 235° (EtOH). XXI with IV-C5H5N gave V (R = Me, Ar = Ch2Ph) [HBr salt m. 212° (EtOH)], equiv. wt. 375. I (R = H) (8 g.) added to 2-picolyllithium (prepd. by metallation of 7.5 g. 2-picoline with LiPh) and the mixt. worked up as usual gave 10 g. crude II (R = H, Ar = 2-picolyl) (XXII) [di-HBr salt m. 220.5° (EtOH)], equiv. wt. 229. Direct acylation of the I (R = H)-2-picolyllithium complex with Ac2O gave VII (R = H, Ar = 2-picolyl) (XXIII) [di-HBr salt m. 238° (EtOH)], equiv. wt. 253. I (R = Me) (15 g.) treated with 2-picolyllithium as before gave 16 g. II (R = Me, Ar = 2-picolyl) (XXIV) [di-HBr salt m. 250° (EtOH)], equiv. wt. 237. XXIV with Ac2O-C5H5N gave, probably, V (R = Me, Ar = 2-picolyl); di-HBr salt m. 240° (EtOH). The analgesic activities of the compds. reported were as follows [compd., analgesic activity (morphine = 100), and analgesic activity (morphine = 100) of 4-Ph analog given]: III, <30, 70; X, 38, 70; XII, 63, 385; XVI, 52, 70; XVII, 30, 385; XVIII, 44, 430; XIV, 38, 70; XV, <30, 35; XXI, 25, 70; XIX, 38, 35; XIXa, <30, 633; XX, <30, 346; XXII, 14, 35; XXIII, 114, 633; VI, <30, 22; XI, <30, 22.

AN 1960:118264 CAPLUS

DN 54:118264

OREF 54:22623h-i,22624a-i,22625a-b

TI N-Phenethyl-4-heteroaryl-4-piperidinols and related compounds

AU Beckett, A. H.; Casy, A. F.; Phillips, P. M.

CS Chelsea Coll. Sci. & Technol., London

SO Journal of Medicinal & Pharmaceutical Chemistry (1960), 2, 245-61
CODEN: JMPCAS; ISSN: 0095-9065

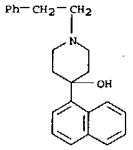
DT Journal

LA Unavailable

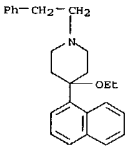
OS CASREACT 54:118264

IT **102559-08-0**, 4-Piperidinol, 4-(1-naphthyl)-1-phenethyl- **102875-20-7**, Piperidine, 4-ethoxy-4-(1-naphthyl)-1-phenethyl-, hydrobromide **113751-76-1**, 4-Piperidinol, 3-methyl-4-(1-naphthyl)-1-phenethyl-, hydrochloride **113751-77-2**, 4-Piperidinol,

L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
3-methyl-4-(1-naphthyl)-1-phenethyl- **122802-92-0**, 3-Pipecoline, 4-ethoxy-4-(1-naphthyl)-1-phenethyl-, hydrochloride
(prepn. of)
RN 102559-08-0 CAPLUS
CN 4-Piperidinol, 4-(1-naphthyl)-1-phenethyl- (6CI) (CA INDEX NAME)



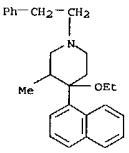
RN 102875-20-7 CAPLUS
CN Piperidine, 4-ethoxy-4-(1-naphthyl)-1-phenethyl-, hydrobromide (6CI) (CA INDEX NAME)



● HBr

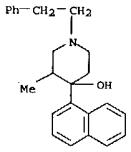
RN 113751-76-1 CAPLUS
CN 4-Piperidinol, 3-methyl-4-(1-naphthyl)-1-phenethyl-, hydrochloride (6CI) (CA INDEX NAME)

L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



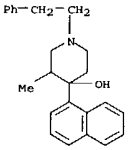
● HCl

L4 ANSWER 21 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)



● HCl

RN 113751-77-2 CAPLUS
CN 4-Piperidinol, 3-methyl-4-(1-naphthyl)-1-phenethyl- (6CI) (CA INDEX NAME)

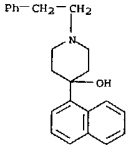


RN 122802-92-0 CAPLUS
CN 3-Pipecoline, 4-ethoxy-4-(1-naphthyl)-1-phenethyl-, hydrochloride (6CI) (CA INDEX NAME)

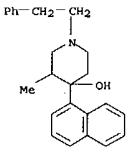
L4 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN
AB N-Phenethyl-4-piperidone (I) (8.12 g.) and PhLi from 7.85 g. PhBr and 0.7 g. Li gave N-phenethyl-4-hydroxy-4-phenylpiperidine (II), m. 102-3°. Phenethylamine (121 g.) neutralized with concentrated HCl, 118 g. α-methylstyrene, and 200 g. formalin were heated 3 hrs. at 80°, the mixture refluxed 5 hrs., cooled, washed with benzene, the aqueous layer made alkaline, extracted with benzene, the extract dried, solvent partially
removed, hexane added to a faint cloud point and the mixture cooled to give
II; HCl salt of 4-Ac derivative m. 214-15.5°; HCl salt of 4-EtCO derivative
m. 201-2°; HCl salt of 4-PrCO derivative m. 195.5°.
N-Phenethyl-3-methyl-4-piperidone (III) (21 g.) and PhLi from 18.9 g. PhBr
and 1.66 g. Li gave N-phenethyl-3-methyl-4-hydroxy-4-phenylpiperidine (IV)
(mixture of isomers), one isomer, m. 106-7°; HCl salt of 4-Ac derivative m. 214-15°; HCl salt of 4-EtCO derivative m. 179.5-80.5° (α-isomer), and 203.5-4.5° (β-isomer). I (16.5 g.) and α-naphthyllithium (V) from 25 g. α-naphthyl bromide (VI) and 1.7 g. Li gave N-phenethyl-4-hydroxy-4-(α-naphthyl)piperidine, m. 173°. III (15 g.) and V from 21 g. VI and 1.4 g. Li gave N-phenethyl-3-methyl-(4α-naphthyl)-4-hydroxypiperidine-HCl, m. 266°. I (17.5 g.) and PhCH2MgBr from 22 g. PhCH2Cl and 4.3 g. Mg gave N-phenethyl-4-hydroxy-4-benzylpiperidine-HBr, m. 218°; HBr salt of 4-Ac derivative m. 241°; HBr salt of 4-EtCO derivative m. 214°. I (30 g.) and BuLi from 28.7 g. BuBr and 3.6 g. Li gave N-phenethyl-4-hydroxy-4-butylpiperidine, m. 53-4°.
AN 1960:110647 CAPLUS
DN 54:110647
OREF 54:21137d-g
TI Amino alcohols and esters
IN Beckett, Arnold H.
DT Patent
LA Unavailable
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI GB 832491		19600413	GB	

IT **102559-08-0**, 4-Piperidinol, 4-(1-naphthyl)-1-phenethyl-
113751-76-1, 4-Piperidinol, 3-methyl-4-(1-naphthyl)-1-phenethyl-, hydrochloride
(preparation of)
RN 102559-08-0 CAPLUS
CN 4-Piperidinol, 4-(1-naphthyl)-1-phenethyl- (6CI) (CA INDEX NAME)



L4 ANSWER 22 OF 22 CAPLUS COPYRIGHT 2004 ACS on STN (Continued)
RN 113751-76-1 CAPLUS
CN 4-Piperidinol, 3-methyl-4-(1-naphthyl)-1-phenethyl-, hydrochloride (6CI) (CA INDEX NAME)



● HCl

11/08/04

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DICTIONARY FILE UPDATES:   7 NOV 2004  HIGHEST RN 776240-21-2

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Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> s thienyl/cn
L5            0 THIENYL/CN

=> s thienyl
L6       281840 THIENYL

=> s thiophene
L7       255316 THIOPHENE

=> s thiophene/cn
L8            1 THIOPHENE/CN

=> d
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L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 110-02-1 REGISTRY
CN **Thiophene (8CI, 9CI)** (CA INDEX NAME)
OTHER NAMES:
CN CP 34
CN Divinylene sulfide
CN Furan, thio-
CN Huile H50
CN Huile HSO
CN NSC 405073
CN Thiacyclopentadiene
CN Thiaphene
CN Thiofuran
CN Thiofurfuran
CN Thiole
CN Thiophen
CN Thiotetrole
FS 3D CONCORD
DR 8014-23-1
MF C4 H4 S
CI COM, RPS
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BEILSTEIN*, BIOBUSINESS,
BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMINFORMRX, CHEMLIST, CHEMSAFE, CIN, CSCHEM, CSNB, DETHERM*,
DIPPR*, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, GMELIN*, HODOC*, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MRCK*, MSDS-OHS, NAPRALERT, NIOSHTIC, PDLCOM*, PIRA, PROMT, PS, RTECS*, SPECINFO, SYNTHLINE, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)
DT.CA CAplus document type: Book; Conference; Dissertation; Journal; Patent; Preprint; Report
RL.P Roles from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
RACT
(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
RACT
(Reactant or reagent); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties);
RACT
(Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); MSC (Miscellaneous); OCCU (Occurrence); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses)

L8 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN (Continued)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

11033 REFERENCES IN FILE CA (1907 TO DATE)
1667 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
11040 REFERENCES IN FILE CAPLUS (1907 TO DATE)
4 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

11/08/04

=> file registry

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	21.59	298.22

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-15.40

FILE 'REGISTRY' ENTERED AT 14:09:44 ON 08 NOV 2004
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STRUCTURE FILE UPDATES: 7 NOV 2004 HIGHEST RN 776240-21-2
DICTIONARY FILE UPDATES: 7 NOV 2004 HIGHEST RN 776240-21-2

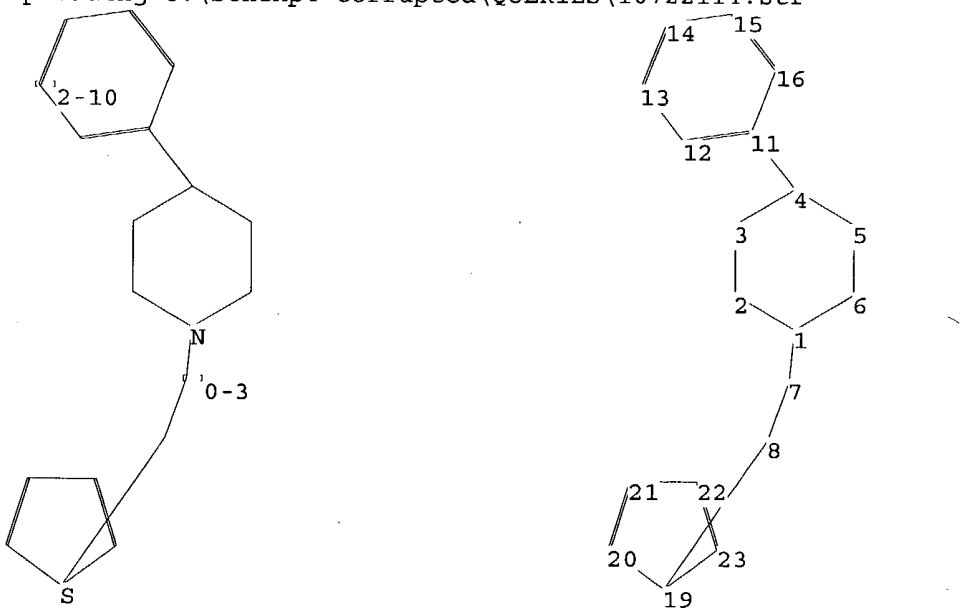
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Stnexp4 corrupted\QUERIES\10722114.str



```
chain nodes :
7  8
ring nodes :
1  2  3  4  5  6  11  12  13  14  15  16  19  20  21  22  23
chain bonds :
1-7  4-11  7-8  8-19
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6  11-12  11-16  12-13  13-14  14-15  15-16  19-20
19-23  20-21  21-22  22-23
exact/norm bonds :
1-2  1-6  1-7  2-3  3-4  4-5  5-6  8-19  19-20  19-23  20-21  21-22  22-23
exact bonds :
4-11  7-8
normalized bonds :
11-12  11-16  12-13  13-14  14-15  15-16


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  11:Atom  12:Atom
13:Atom  14:Atom  15:Atom  16:Atom  19:Atom  20:Atom  21:Atom  22:CLASS  23:CLASS



L9       STRUCTURE UPLOADED

=> d l9
L9 HAS NO ANSWERS
L9              STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY -  AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.


=> s l9
SAMPLE SEARCH INITIATED 14:10:03 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     75 TO ITERATE

100.0% PROCESSED      75 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          981 TO     2019
PROJECTED ANSWERS:               0 TO        0

L10           0 SEA SSS SAM L9

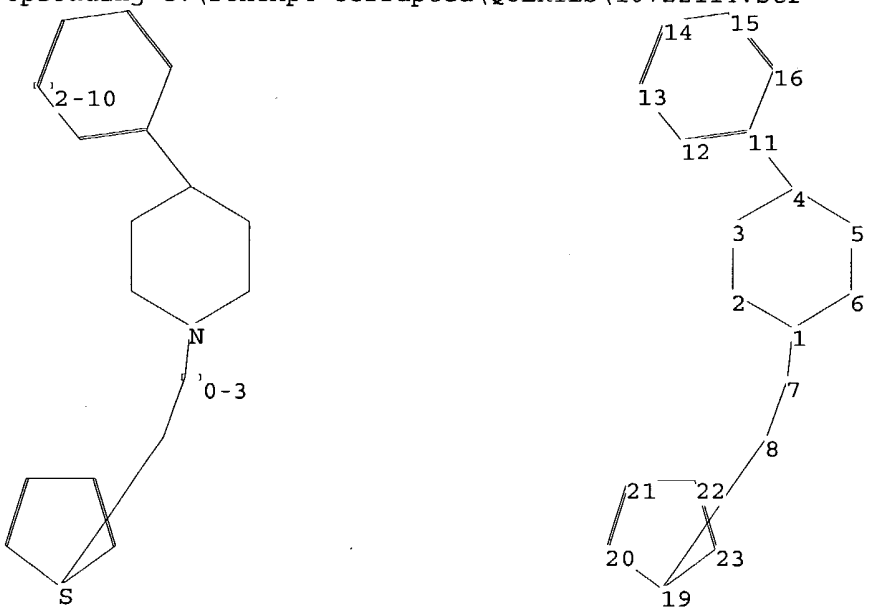
=> s l9 ful
FULL SEARCH INITIATED 14:10:09 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   1596 TO ITERATE

100.0% PROCESSED    1596 ITERATIONS                                  0 ANSWERS
SEARCH TIME: 00.00.01

L11           0 SEA SSS FUL L9
```

11/08/04

=>
Uploading C:\Stnexp4 corrupted\QUERIES\10722114.str



chain nodes :
7 8
ring nodes :
1 2 3 4 5 6 11 12 13 14 15 16 19 20 21 22 23
chain bonds :
1-7 4-11 7-8 8-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20
19-23 20-21 21-22 22-23
exact/norm bonds :
1-2 1-6 1-7 2-3 3-4 4-5 5-6 8-19 19-20 19-23 20-21 21-22 22-23
exact bonds :
4-11 7-8
normalized bonds :
11-12 11-16 12-13 13-14 14-15 15-16

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:Atom 19:Atom 20:Atom 21:Atom 22:CLASS 23:CLASS

L12 STRUCTURE UPLOADED

=> d l12
L12 HAS NO ANSWERS
L12 STR

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

```
=> s l12
SAMPLE SEARCH INITIATED 14:11:09 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     59 TO ITERATE

100.0% PROCESSED      59 ITERATIONS                                 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:          720 TO     1640
PROJECTED ANSWERS:               0 TO        0

L13            0 SEA SSS SAM L12

=> s l12 ful
FULL SEARCH INITIATED 14:11:15 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -   1219 TO ITERATE

100.0% PROCESSED    1219 ITERATIONS                                 0 ANSWERS
SEARCH TIME: 00.00.01

L14            0 SEA SSS FUL L12

=> file registry
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                   311.68     609.90

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                       ENTRY    SESSION
CA SUBSCRIBER PRICE                                     0.00     -15.40

FILE 'REGISTRY' ENTERED AT 14:12:24 ON 08 NOV 2004
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STRUCTURE FILE UPDATES:     7 NOV 2004  HIGHEST RN 776240-21-2
DICTIONARY FILE UPDATES:    7 NOV 2004  HIGHEST RN 776240-21-2

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
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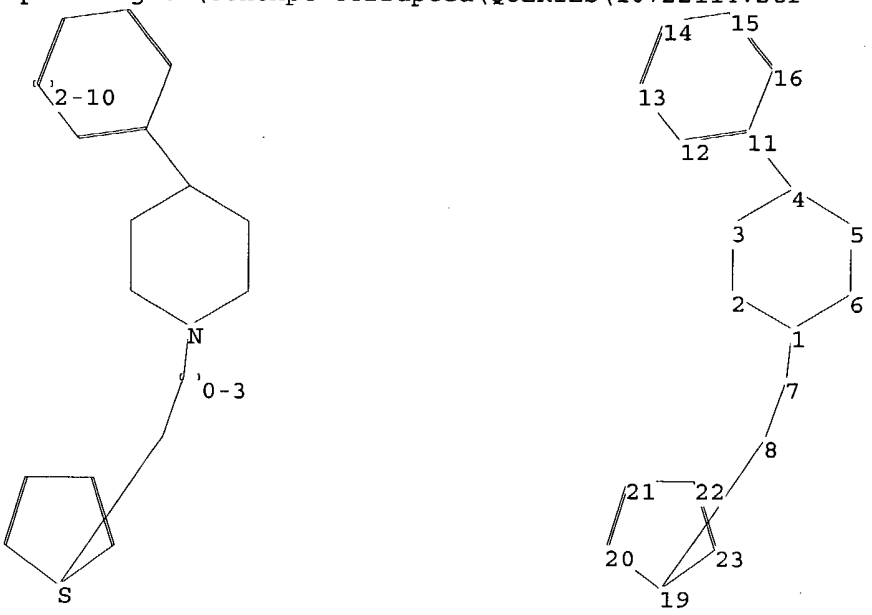
11/08/04

http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Stnexp4 corrupted\QUERIES\10722114.str



chain nodes :
7 8
ring nodes :
1 2 3 4 5 6 11 12 13 14 15 16 19 20 21 22 23
chain bonds :
1-7 4-11 7-8 8-19
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 19-20
19-23 20-21 21-22 22-23
exact/norm bonds :
1-2 1-6 1-7 2-3 3-4 4-5 5-6 8-19 19-20 19-23 20-21 21-22 22-23
exact bonds :
4-11 7-8
normalized bonds :
11-12 11-16 12-13 13-14 14-15 15-16

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 11:Atom 12:Atom
13:Atom 14:Atom 15:Atom 16:Atom 19:Atom 20:Atom 21:Atom 22:CLASS 23:CLASS

L15 STRUCTURE UPLOADED

=> d l15
L15 HAS NO ANSWERS
L15 STR

11/08/04

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

Structure attributes must be viewed using STN Express query preparation.

=> s l15 ful
FULL SEARCH INITIATED 14:12:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 2 TO ITERATE

100.0% PROCESSED 2 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L16 0 SEA SSS FUL L15

=> logoff y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	765.32

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-15.40

STN INTERNATIONAL LOGOFF AT 14:13:04 ON 08 NOV 2004